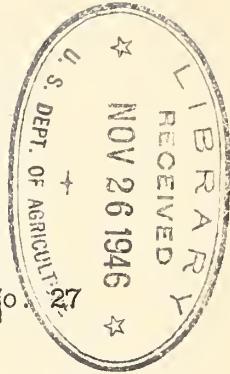
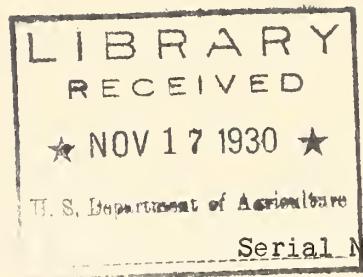


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Excerpt from a radio talk by
W. R. M. Wharton, Chief, Eastern
District, Food and Drug Administra-
tion, U. S. Department of Agricul-
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HOW TO READ THE LABEL

Milk

Do you know the most important statement on a milk-cap label; the statement which means so much with respect to the safety of the product? There is perhaps no other statement applied to dairy products which should mean so much to consumers. What do you look for when you buy milk? Do you read the label? Or do you buy milk on the basis of the extent of the cream line alone? Or do you buy milk on the basis of price alone? Neither the cream line, nor the price, nor any other consideration should influence you as much as the statement on the label regarding grade. You should know for what this grade stands.

Milk which contains certain disease-producing bacteria may be the means of transmitting serious diseases. Pasteurization—a process of heating every particle of milk to a temperature of 142 – 145°F. and holding for not less than 30 minutes — when properly conducted, kills the disease-producing bacteria. Pasteurization was devised by Louis Pasteur, a famous French scientist, about 50 years ago.

Now my friends, do you not see why the statement on the cap is the most important thing for which to look. It is especially important when you are traveling and buy milk from unknown sources — for yourselves and your children — that you refuse to accept any bottle of milk which does not designate a grade which will fully certify as to its wholesomeness. So, my friends, read the label, and learn to know its meaning.

The transmission of tuberculosis through milk has been conclusively proved. It is now a generally accepted fact that tuberculosis in the cow can be transmitted to humans — by milk. There is, at the present time, an almost nation-wide program of testing dairy cows and slaughtering those cows which are suffering from bovine tuberculosis. If milk you use is produced from tuberculin-tested herds, from which reactors have been excluded, then the danger of contracting tuberculosis from milk is effectively removed. Hence, it is most important to know whether the milk you use is produced by tuberculin-tested herds and if such is not the case, it becomes more important to know that the milk has been pasteurized.

Milk may also be effectively safeguarded and made reasonably safe by hygienic and sanitary methods of production. The most stringently controlled conditions of production are required for "certified milk."

"Certified milk" is usually sold in the raw state, although recently some certified-milk producers have begun to pasteurize their product. Cows producing such milk must be tested at least semi-annually for tuberculosis and physically tested each month by a veterinarian to exclude diseased animals. All persons handling certified milk are required to be proved healthy by a medical examination at least once each month. All stables, dairies, utensils, and all conditions of production must be as nearly perfect from a sanitary standpoint as it is possible to make them. The milk itself must not contain more than 10,000 bacteria per cubic centimeter at any time. The rigid sanitary requirements for certified milk were formulated by the American Association of Medical Milk Commissioners, Inc., and the control to secure compliance with these specifications of sanitary quality is performed by the Medical Milk Commissioners of each county in which certified milk is produced or consumed. Practically all of the State health departments and the health departments of large cities require reports from the Medical Milk Commissioners exercising control. The word "certified," then, means that the Medical Milk Commissioners have certified to the high sanitary conditions of production of the milk--and that the product contains no more than 10,000 total bacteria per cubic centimeter--and that all label statements are true. The cap label on certified milk states that the product is certified milk. It also states the place of production and the date of production. Certified milk should not reach you later than the next day after production. Therefore, read the label to make sure that you are getting certified milk when you buy it. Also make sure that it has been delivered to you promptly.

Certain municipal and state health departments require milk to be labeled and sold by grade and these grade designations give you, if you know what they mean, an accurate idea of the relative sanitary quality of the milk you buy. The practice of milk-grading differs somewhat in different localities. For specific information as to grades and grade designations and their meanings in your own locality, inquire of your State or city health department. I shall discuss this subject of grading milk in general terms. In many communities, besides certified milk, four grades of milk are sold, viz., Grade A. Pasteurized Milk; Grade B. Pasteurized Milk; Grade A. Raw Milk; and Grade B. Raw Milk.

While the sanitary requirements for these different grades may vary slightly in different localities, the New York State requirements will illustrate generally the relative differences of these grades. In New York State, to be entitled to be labeled Pasteurized Grade A Milk, the product must be so carefully produced, handled and cooled as to give, before pasteurization, a count of not more than 100,000 bacteria per cubic centimeter if pasteurized at the place of production, or of 200,000 if shipped by rail to a pasteurization plant. Such milk must give at any time after pasteurization a bacterial count of not more than 30,000 per cubic centimeter. This milk is required to be pasteurized under strict conditions of sanitation which are controlled by State inspection. Grade A Milk can be handled only during the process of pasteurization and thereafter by medically-inspected employees found free from disease. This milk must be delivered to the consumer within 36 hours after pasteurization.

New York State, Pasteurized Grade B Milk must be produced, handled and cooled so as to give before pasteurization a bacteria count of not more than 300,000 per cubic centimeter if pasteurized at the place of production, or not more than 750,000 if shipped by rail to pasteurization plant, and shall not at any time after pasteurization give a bacterial count of more than 50,000 per cubic centimeter. Such milk must be delivered to the consumer within 48 hours after pasteurization.

Now, note the differences between Pasteurized Grade A and Pasteurized Grade B Milk. Grade A, before pasteurization allows 100,000 bacteria per cubic centimeter if pasteurized at the place of production. Grade B allows 300,000. Grade A allows 200,000 bacteria if shipped by rail to a pasteurization plant. Grade B allows 750,000 under such conditions. In the finished pasteurized product, Grade A allows not more than 30,000 per cubic centimeter; Grade B allows not more than 50,000. Grade A is required to be delivered within 36 hours. Grade B may be delivered within 48 hours after pasteurization. Grade A milk must be handled during pasteurization and after pasteurization by medically-examined employees found free from communicable diseases. Grade B requirements do not insist upon this medical certification of employees, yet due to the high sanitary requirements of bottling plants and mechanical methods of handling, Grade B Pasteurized Milk is a reasonably safe milk from the standpoint of disease transmission.

Grade A Raw Milk, according to New York State regulations, must come from cows which have passed the tuberculin test and must be produced and cooled so as to result in a product which shall contain not more than 30,000 bacteria per cubic centimeter, and all employees handling the milk are required to pass physical examinations showing they are free from communicable diseases. Grade A Raw Milk must be delivered within 36 hours after milking.

Grade B Raw Milk, according to the New York State Code, must conform in all respects to the standards and requirements specified for Grade A Raw Milk, except that it may come from herds which have not at the time been tuberculin-tested, but which have made formal application in writing to the state department for tuberculin tests of his cattle.

In some localities, the Grade B designation applies to all milk not otherwise defined by higher grades. In some localities, still a third grade, Grade C, milk is sold. Grade C is generally all other milk than that which is specified as being of higher grade. Grade C milk is intended for cooking purposes. My advice is to use such milk ONLY for cooking purposes.

Some cities require the date and place of pasteurization to be declared on the labels. This, of course, gives the label reader an opportunity to determine the age of the product.

In the foregoing discussion I have talked exclusively of sanitary

quality. The requirements of butter fat and total solids content in milk vary somewhat in different localities. For example, in some cities, milk is legal if it has 3% butter fat whereas other cities require as much as 3½% butter fat. The adulteration of milk by adding water or that resulting from removal of butter fat is effectively prohibited and so, regardless of the grade, you will practically always receive an unadulterated milk. Consult your city and State health departments for information as to local standards for fat and solids.

And now, my radio friends, I want you to remember that milk is the most nearly perfect single article of food. It contains, in proper quantities in easily digestible form, most of the nourishing food elements. It is rich in calcium and phosphorus, essential mineral elements, and moreover the fat is rich in vitamin A which is essential to growth and undoubtedly a factor in resistance to infectious disease.

Let me urge you, then, to use plenty of milk in the diet, especially for the children, and let me say to you that it pays to buy good milk and it pays to buy safe milk. Read the labels and be guided by the information you get from reading labels.